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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,260	07/08/2003	Paul Boudreux	15499RRUS02U	8145
7590	07/27/2007		EXAMINER	
James A. Harrison P.O. Box 670007 Dallas, TX 75367			SONI, KETAN S	
		ART UNIT	PAPER NUMBER	
			2616	
		MAIL DATE	DELIVERY MODE	
		07/27/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/615,260	BOUDREAU ET AL.	
Examiner	Art Unit		
Ketan Soni	2616		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 08 July 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) 13 and 20 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 07 July 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. ____ .
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date None. 5) Notice of Informal Patent Application
6) Other: ____ .

DETAILED ACTION

Information Disclosure Statement

No information disclosure statement submitted with this application.

Claim Objections

Claim 13 is objected to because of the following informalities:

Claim: 13, line: 3 should be changed to "a HLR for providing..."

Appropriate correction is required.

Claim 20 is objected to because of the following informalities:

Claim: 20, line: 1 should be changed to "The signaling gateway of claim: 19..." because it creates incorrect dependency. For the prosecution of this application above assumption is made.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-7, and 9 are rejected under 35 U.S.C. 102(a) as being anticipated by **Davidson et al. (US 6408182)**.

Consider **claim: 1**, Davidson et al. discloses a method for transferring call control to a backup call server (Fig: 2 @ 49, 50, and back up MSC can take control of primary

MSC which has failed, col: 3, lines: 16), comprising: monitoring a primary call server to determine an active or inactive state of said primary call server (Fig: 3 @ 61 base station controller starts a "status request" message or similar and starts timer. If the timer expires or a failover command is received then BSC decides MSC is active or not, col: 3, lines: 39-44); and upon receipt of an inactive state for said primary call server, forwarding signaling messages from a signaling gateway to a backup call server wherein each signaling gateway may have a different backup call server (after receiving a status request or a PING message guard timer in the BSC is started. If the guard timer expires at step 63 without receiving a response from MSC 49, or if a failover command is received in the BSC at 64, the BSC consults an alternative MSC list at step 65, col: 3, lines: 39-43).

Consider **claim: 2**, Davidson et al. discloses the method of claim 1 wherein the step of forwarding signaling messages further includes encapsulating the signaling message in a data packet with the destination address of the backup server (As shown in fig: 2, MSC1 and backup server MSC2 are connected to an Internet Protocol network 51 enables that signaling messages are formatted with packet based IP network; Additionally new alternative address of backup MSC can be stored in number of different formats such as IP address or other equivalent formats, col: 3, lines: 30-32).

Consider **claim: 3**, Davidson et al. discloses the method of claim 1 wherein the step of forwarding signaling messages further includes mapping a new destination

address from the signaling gateway to the backup call server (Upon failure of master MSC, the alternative MSC addresses may be stored in a number of different formats such as, for example, Point Code, Global Title, Ordinal Identifier, IP address, E.164 number, an other equivalent type formats, col: 3, lines: 30-33).

Consider **claim: 4**, Davidson et al. discloses the method of claim 1 wherein a plurality of signaling gateways each distribute signaling messages destined for the primary call server to a plurality of backup call servers (There are number of MSCs available in the network. Each BSC or each radio network controller (RNC) maintains a list of MSCs in the network and this list includes at least one MSC that is a default master MSC, and at least one MSC that is an alternate MSC, col: 3, lines: 20-22).

Consider **claim: 5**, Davidson et al. discloses the method of claim 1 further includes determining the primary call server has transitioned to the active state and subsequently thereto, forwarding signaling to the primary call server (The BSC continues pinging the original MSC 49 periodically interrogating the original MSC for its status to determine when operation is restored, when original operation is restored, it uses originating MSC, col: 3, lines: 61-63).

Consider **claim: 6**, Davidson et al. discloses the method of claim 5 wherein the primary call server is provisioned to process all signaling messages it would have processed prior to transitioning to the inactive state (The backup MSC is used until the

original MSC sends a RESET message, or equivalent, indicating that the original MSC is again operational. And BSC resumes sending mobile-originated call requests to the original MSC to process call messages, col: 4, lines: 30-34).

Consider **claim: 7**, Davidson et al. discloses the method of claim 5 wherein the primary call server is provisioned to process different signaling messages from what it would have processed prior to transitioning to the inactive state (Two alternative approaches are provided when the original MSC 49 resumes operation: First approach is that where the backup MSC clears any calls in process unless they are emergency calls or second approach of fig: 3-C of step 91 where the backup MSC retains calls in process until they are completed. Thus primary call server is able to process differently than what it supposed before goes to inactive state, col: 4, lines: 34-40).

Consider **claim: 9**, Davidson et al. discloses the method of claim 1 wherein the primary call server also functions as a backup call server and further wherein the backup call server also functions as a primary call server (As shown in Fig: 2, both MSC-1 and MSC-2 are capable of serving as a primary or back up server as needed).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10-18, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Davidson et al. (6408182).

Consider claim: 10, Applicant's Admitted Prior Art in figure: 1 discloses, transmitting call setup signals between a calling party mobile station and a BSC (Applicant admitted prior art, fig: 1 call is setup between mobile station 38 and Base station 14); transmitting call setup signals between the BSC and an originating MSC (Applicant admitted prior art, as shown in fig: 1 call is transmitted thru Base station 14 to mobile switching centre 18); transmitting call setup signals between the originating MSC

and a gateway-MSC (G-MSC) by way of a first signaling gateway (Applicant admitted prior art, as shown in fig: 1 call is first transmitted thru MSC18 to Gateway MSC 34); transmitting call setup signals from the G-MSC to an HLR, by way of a second signaling gateway, to determine a destination MSC (Applicant admitted prior art, as shown in fig: 1, G-MSC queries a HLR 30 to determine location of MSC); transmitting destination MSC information from the HLR to the G-MSC by way of the second signaling gateway (Applicant admitted prior art, as shown in fig: 1, HLR returns an identifying MSC information to transfer control information); and establishing a call connection between the calling party mobile station and a called party mobile station (Applicant admitted prior art, as shown in fig: 1 call is completed from mobile station 38 to 42). But fails to disclose upon determining that destination MSC has failed, and establishing a connection between backup MSC and originating MSC, and upon determining that destination G-MSC has failed and establishing connection between the backup G-MSC and originating MSC.

However in the same field of endeavor, Davidson et al. discloses transferring call control to a backup call server *when original MSC has failed* or upon determining that destination MSC has failed, and establishes connection between the back up device and originating device (As shown in Fig: 2, after implementation of backup MSC2 @ 50, both MSCs are connected thru HLR 52. And upon receiving a failure indication from the MSC (or no reply from MSC at all) HLR routes the call to back up MSC step- 87, col: 4, lines: 25-30). Examiner takes official notice that it will be obvious for those skilled in the art to use and apply transferring call control to a backup call server upon failure of

original G-MSC to a backup G-MSC using the similar steps as disclosed above for the MSC by Davidson et al. when determining that destination MSC has failed, and establishes connection between the back up device and originating device.

Therefore it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate and provide failover operations covering large coverage area as disclosed by Davidson et al. with the applicant's admitted prior art of the infrastructure for the telecommunications. The motivation is to provide failover operation covering large coverage area in telecommunication operations.

Consider **claim: 11**, and as applied to claim: 10, Applicant's admitted prior art in view of Davidson et al. discloses the claim: 10. In addition Applicant's admitted prior art discloses MSC and G-MSC are same physical device and can perform similar functions. Further taught by combination and specifically taught by Davidson et al. wherein the call setup signals from the G-MSC to the backup MSC further comprises routing a first portion of the call setup signals from the G-MSC to a first backup MSC and a second portion of the call setup signals from the G-MSC to a second backup MSC (Each list of MSC at least includes one MSC and multiple alternate MSC. Selection criteria of choosing backup or alternate MSC is based on Master MSC failure, time, day etc call characteristics, col: 3, lines: 22-25).

Consider **claim: 12**, and as applied to claim: 10, Applicant's admitted prior art in view of Davidson et al. discloses the claim: 10. In addition Applicant's admitted prior art discloses MSC and G-MSC are same physical device. Further taught by combination

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and specifically taught by Davidson et al. wherein the call setup signals from the G-MSC to the backup MSC further comprises routing a first portion of the call setup signals to a first backup G-MSC and a second portion of the call setup signals to a second backup G-MSC (Each list of MSC at least includes one MSC and multiple alternate MSC).

Selection criteria of choosing backup or alternate MSC is based on Master MSC failure, time, day etc call characteristics, col: 3, lines: 22-25).

Consider **claim: 8**, Davidson et al. discloses the method of claim 1 for the primary call server and backup call server but is silent about being a similar physical structure of MSC and G-MSC, and additionally HLR as a part of active and back-up server. However in the same field of endeavor, Applicant's admitted prior art discloses MSC and G-MSC are same physical devices, and fig: 1 of Applicant's admitted prior art discloses MSC and G-MSC, and HLR.

Consider **claim: 13**, Applicant's admitted prior art discloses cellular network (Fig: 1 shows simplified Radio telecommunication network), comprising: a G-MSC (MSC and G-MSC are similar physical device) for establishing call connections between originating MSCs and destination MSCs (Fig: 1 @ MSC-18 & MSC-26); a HLR for providing location information to the G-MSC as a part of call setup (Fig: 1 @ HLR-30); at least one signaling gateway coupled between G-MSC and the HLR (Fig: 1, MSC-18 and MSC-26 communicate with HLR 30 thru gateway MSC-34); wherein the HLR determines a primary MSC to serve as a destination MSC for a call

being setup based upon a called party mobile station location (Fig: 1, HLR 30 thru gateway MSC 34 controls MSC-18 and MSC-26 as a source or destination).

In the same field of endeavor, Davidson et al. discloses the HLR transmits call signaling messages to the at least one signaling gateway coupled between the HLR and the G-MSC (Examiner takes official notice that MSC, and GMSC are similar devices as further evidence in the applicant admitted prior art. Additionally as per Davidson et al. Fig: 2, each MSC is connected thru signaling links to a HLR 52); and wherein the at least one signaling gateway redirects the call signaling messages to a backup G-MSC upon detecting that the G-MSC is in an inactive state (From applicant admitted prior art, MSC and GMSC are similar physical devices and can perform similar functions. Examiner takes official notice that MSC, and GMSC are similar devices as further evidence in the applicant admitted prior art. Additionally as per Davidson et al. Fig: 3-C, steps 81, 82, 83 and 86).

Consider **claim: 14**, Applicant's admitted prior art discloses a cellular network (Fig: 1 shows simplified Radio telecommunication network), comprising: a G-MSC (MSC and G-MSC are similar physical device) for establishing call connections between originating MSCs and destination MSCs (Fig: 1 @ MSC-18 & MSC-26); a HLR for providing location information to the G-MSC as a part of call setup (Fig: 1 @ HLR-30); a first signaling gateway within a first plurality of signaling gateways coupled between each of a plurality of MSCs and the G-MSC (Applicant admitted prior art, as shown in fig: 1 call is first transmitted thru MSC18 to Gateway MSC 34. In addition, Davidson et

al. discloses there are number of MSCs available in the network. Each BSC or each radio network controller (RNC) maintains a list of MSCs in the network and this list includes at least one MSC that is a default master MSC, and at least one MSC that is an alternate MSC, col: 3, lines: 20-22); a second signaling gateway coupled between the G-MSC and the HLR (Applicant admitted prior art, as shown in fig: 1, G-MSC 34 to HLR 30); wherein the HLR reports a destination MSC for a call being setup based upon a called party mobile station location record maintained in the HLR (Applicant admitted prior art, as shown in fig: 1, G-MSC queries a HLR 30 to determine location of MSC); wherein the HLR transmits call signaling messages to the second gateway coupled between the HLR and the G-MSC (Applicant admitted prior art, as shown in fig: 1, HLR 30 transmits to G-MSC 34).

In the same field of endeavor, Davidson et al. discloses wherein the second signaling gateway redirects the call signaling messages to a first backup G-MSC upon detecting that the G-MSC is in an inactive state (From applicant admitted prior art, MSC and GMSC are similar physical devices and can perform similar functions. Examiner takes official notice that MSC, and GMSC are similar devices as further evidence in the applicant admitted prior art. Additionally as per Davidson et al., as shown in Fig: 2, after implementation of backup MSC2 @ 50, both MSCs are connected thru HLR 52. And upon receiving a failure indication from the MSC (or no reply from MSC at all) HLR routes the call to back up MSC step- 87, col: 4, lines: 25-30); and wherein the first signaling gateway redirects the call signaling messages (Fig: 3-C, step 86, upon failure indication, HLR routes call message to backup MSC) to a second backup G-MSC upon

detecting that the G-MSC is in an inactive state (From applicant admitted prior art, MSC and GMSC are similar physical devices and can perform similar functions. Examiner takes official notice that MSC, and GMSC are similar devices as further evidence in the applicant admitted prior art. Additionally as per Davidson et al., each list of MSC at least includes one MSC and multiple alternate MSC. Selection criteria of choosing backup or alternate MSC is based on Master MSC failure, time, day etc call characteristics, col: 3, lines: 22-25).

Consider **claim: 15**, and as applied to claim: 14 above, Applicant's admitted prior art as modified by Davidson et al. discloses the claim: 14. Further taught by combination, and specifically Davidson et al. wherein the second gateway coupled between G-MSC and the HLR comprises one of a plurality of signaling gateways (Examiner takes official notice that MSC, and GMSC are similar devices as further evidence in the applicant admitted prior art. Additionally as per Davidson et al. Number of MSCs available in the network as the backup list, and each BSC or each radio network controller (RNC) maintains a list of MSCs in the network and this list includes at least one MSC that is a default master MSC, and at least one MSC that is an alternate MSC, col: 3, lines: 20-22).

Consider **claim: 16**, and as applied to claim: 14 above, Applicant's admitted prior art as modified by Davidson et al. discloses the claim: 14. Further taught by combination, and specifically Davidson et al. wherein the cellular network of claim 14 further comprising at least one signaling gateway coupled between the G-MSC and an

originating MSC (Examiner takes official notice that MSC, and GMSC are similar devices as further evidence in the applicant admitted prior art. Additionally as per Davidson et al. number of MSCs available in the network as the backup list, and in each list, at least one MSC that is a default master MSC, and at least one MSC that is an alternate MSC, col: 3, lines: 20-24).

Consider **claim: 17**, and as applied to claim: 14 above, Applicant's admitted prior art as modified by Davidson et al. discloses the claim: 14. Further taught by combination, and specifically Davidson et al. wherein the cellular network at least one signaling gateway coupled between the G-MSC and a destination MSC (Examiner takes official notice that MSC, and GMSC are similar devices as further evidence in the applicant admitted prior art. Additionally as per Davidson et al. as shown in fig: 2, two MSCs are connected thru HLR; additionally when number of MSCs available in the network as the backup list, at least one MSC that is a default master MSC, and at least one MSC that is an alternate MSC, col: 3, lines: 20-24).

Consider **claim: 18**, and as applied to claim: 17 above, Applicant's admitted prior art as modified by Davidson et al. discloses the claim: 17. Further taught by combination, and specifically Davidson et al. wherein the cellular network at least one of the first and second backup G-MSC also operates as a primary G-MSC (Examiner takes official notice that MSC, and GMSC are similar devices as further evidence in the applicant admitted prior art. Additionally as per Davidson et al. at least one MSC that is

a default master MSC, and at least one MSC that is an alternate MSC, col: 3, lines: 20-24).

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Davidson et al. (6408182) and further in view of Manzardo (US 2003/0061319 A1).

Consider **claim: 19**, Applicant's admitted prior art shows a signaling gateway (Figure: 1, G-MSC 34) for a cellular network coupled to communicate with a destination switching element and to at least one home location register (Fig: 1 @ MSC-26 as a destination, and a HLR 30). In the same field of endeavor, Manzardo discloses, the structure of a server comprising: a processor (Fig: 8, Processor 360); a memory for storing computer instructions that define the operational logic of the signaling gateway (Fig: 8, Memory 362 and 364), but fails to disclose, receiving call signaling messages from one of the HLR or an initiating MSC; determining whether the destination switching element is in an inactive state; if the destination switching element is in an inactive state, determining a first backup switching element; and transparently forwarding the call signaling messages to the backup switching element.

In the same field of endeavor, Davidson et al. discloses receiving call signaling messages from one of the HLR or an initiating MSC (Fig: 3-C, step: 81 for receiving a call in HLR, which then sent to MSC); determining whether the destination switching element is in an inactive state (Fig: 3-C, Step: 83 for sending a failure indication to HLR

from MSC, saying I'm not in an active state); if the destination switching element is in an inactive state, determining a first backup switching element (There is a list of available MSCs for the back-up. This list includes multiple MSCs and selection criteria to make decision based on the information about failed MSC, col: 3, lines: 24-26); and transparently forwarding the call signaling messages to the backup switching element (Fig: 3-C, step: 86, HLR sends the message to back-up MSC).

Therefore it would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate and provide failover operations covering large coverage area as disclosed by Davidson et al. with the applicant's admitted prior art of the infrastructure for the telecommunications and with the teaching from Manzardo for disclosing structure of the server. The motivation is to provide failover operation covering large coverage area in telecommunication operations.

Consider **claim: 20**, Applicant's admitted prior art as modified by Davidson et al. and Manzardo discloses the claim: 19. Further taught by combination and specifically by Davidson et al. wherein the signaling gateway of claim 19 further including determining a second backup-switching element (There is a list of available MSCs for the back up. This list includes multiple MSCs and selection criteria to choose MSC is the decision based on the information about failed MSC and other traffic, col: 3, lines: 24-26); and transparently forwarding a first group of call signaling messages to the first backup switching element and transparently forwarding a second group of call signaling messages to the second backup switching element (Each list of MSC at least includes one MSC and multiple alternate MSC. Selection criteria of choosing backup or alternate

MSC is based on Master MSC failure, time, day etc call characteristics, col: 3, lines: 22-25).

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

- Chong et al. (U.S. Pub/Patent # 6205557) discloses: Redundant call processing
- Wood et al. (U.S. Pub/Patent # 2004/0259531) discloses: Message transmission system and method
- Chung et al. (U.S. Pub/Patent # 6301352) discloses: Method and system for providing an alternative common channel signaling path
- Nelson et al. (U.S. Pub/Patent # 4587651) discloses: Distributed variable bandwidth switch for voice, data, and image communications
- Foti, George (U.S. Pub/Patent # 5839064) discloses: System and method of dynamic allocation of redundant peripheral equipment gateways in a radio telecommunications network
- Imai et al. (U.S. Pub/Patent # 5,802,298) discloses: Defect-free type remote procedure call system and method.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
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Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building

401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ketan Soni whose telephone number is (571) 270-1782. The Examiner can normally be reached on Monday-Thursday from 7:30am to 6:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Vanderpuye, Kenneth can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028. If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Ketan Soni

ks

Jul 19, 2007.



KENNETH VANDERPUYE
SUPERVISORY PATENT EXAMINER